

IN THE SPECIFICATION

On page 2 of the specification, please replace the paragraph spanning lines 10-22 with the following amended paragraph:

FIGURE 1 is a diagram illustrating a GPRS system for GSM;

FIGURE 2 is a diagram illustrating a system for fast GPRS for GSM;

FIGURE 3 is a diagram illustrating a GPRS system for UMTS;

FIGURE 4 is a diagram illustrating a system for fast GPRS for UMTS;

FIGURE 5 is a diagram illustrating contents of an exemplary packet format for router advertisements in a system and method for fast GPRS;

FIGURE 6 is a diagram illustrating an example of prefix information coding in a system and method for fast GPRS;

FIGURE 7 is a diagram illustrating contents of an exemplary routing area identification information element in a system and method for fast GPRS; [[and]]

FIGURE 8 is a diagram illustrating a table showing exemplary routing area update request message content in a system and method for fast GPRS, in accordance with the present invention; and

FIGURE 9 is a diagram illustrating an exemplary mobile node.

On page 4 of the specification, please replace the paragraph spanning lines 5-12 with the following amended paragraph:

The current GPRS system relies on two network elements, SGSN 106, 306, and GGSN 108, 308, and the tunneling protocol called GTP between them (shown as GTP-U 110, 112, 310, 312). The traffic between the mobile node and the correspondent flows ~~goes~~ through a tunnel that is typically anchored into one GGSN 108, 308. This causes inefficiency in the routing of data within the GPRS system. By applying mobile IPv6 more straightforward mechanisms a more streamlined

routing could be achieved and also an evolution path towards interworking with native mobile IPv6 based networking could be accomplished.

Please replace the paragraph beginning on page 4, at line 23 and ending on page 5, line 6 with the following amended paragraph:

Example embodiments of systems for Fast GPRS for IPv6 in accordance with the present invention are shown in the block diagrams 200 and 400 of FIG. 2 and FIG. 4 respectively. In an embodiment of the present invention, an improvement is made to Mobile IPv6 by rapidly notifying the IP6 IPv6 layer of mobility within the cellular network rapidly, which network, which improves GPRS routing and throughput by using Mobile IPv6 instead of GTP. (See 204 in the GSM type GPRS system 200 of FIG. 2 and see 404 in the UMTS-type GPRS system 400 of FIG. 4.) An additional advantage of FAST GPRS is that it co-exists with the GPRS and it is hence possible to use at some times the FAST GPRS and in others come back to the conventional solution. Interworking between GPRS networks and native mobile IPv6 networks would be easier. For more information on combining GSM and Mobile IP Mobility Handling, see 3GPP Technical Specification Group Services and System Aspects; Combined GSM and Mobile IP Mobility Handling in UMTS IP (3G TR 23.923 version 3.0.0), which is herein incorporated by reference. In particular, 3G TR 23.923 version 3.0.0 discloses that Binding Update messages can include a mobile terminal's new care-of address (see, e.g., numbered page 70) and that a mobile terminal can generate and send a Binding Update message (see, e.g., Figure A.5 on numbered page 71).

On page 6 of the specification, after line 13 please add the following paragraph:

FIGURE 9 illustrates an exemplary mobile node 902, that includes a MAC layer module 904, an IPv6 layer module 906, and an encapsulation module 908, arranged to perform the respective functions described herein. The mobile nodes 102, 302 can be implemented using the mobile node 902 and/or the structure shown in FIGURE 9.